### F2A-DMDM-1M-P

FSJ2-50 SureFlex® Jumper with interface types 7-16 DIN Male and 7-

#### Product Classification

Product Type		SureFlex® Premium, static PIM
Product Brand		HELIAX®   SureFlex®
Product Series		FSJ2-50
General Specifications		
Body Style, Connector A		Straight
Body Style, Connector B		Straight
Interface, Connector A		7-16 DIN Male
Interface, Connector B		7-16 DIN Male
Specification Sheet Revision Level		А
Dimensions		
Length		1 m   3.281 ft
Nominal Size		3/8 in
Electrical Specifications		
3rd Order IMD Static		-110 dBm
3rd Order IMD Static Test Method		Two +43 dBm carriers
VSWR/Return Loss		
Frequency Band	VSWR	Return Loss (dB)

VSWR/Return La	ISS	
Frequency Band	VSWR	Return Los
698–960 MHz	1.101	26.36
1700-2200 MHz	1.101	26.36

1.101

#### Jumper Assembly Sample Label

2200-2700 MHz

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26.36

**COMMSCOPE**<sup>®</sup>

### F2A-DMDM-1M-P



#### **Environmental Specifications**

**Immersion Test Method** 

Meets IEC 60529:2001, IP68 in mated condition

#### Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant



#### Included Products

35422-42	_	Heat Treated FSJ2-50, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 3/8 in, black PE jacket
FSJ2-50	-	FSJ2-50, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 3/8 in, black PE jacket

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Heat Treated FSJ2-50, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 3/8 in, black PE jacket

Coaxial wireless cable

7.112 mm | 0.28 in

2.794 mm | 0.11 in

9.652 mm | 0.38 in

3/8 in

10.541 mm | 0.415 in

FSJ2-50

HELIAX® | SureFlex®

#### Product Classification

Product Type Product Brand

Product Series

#### General Specifications

 Flexibility
 Superflexible

 Jacket Color
 Black

 Performance Note
 Attenuation values typical, guaranteed within 5%

#### Dimensions

Diameter Over Dielectric Diameter Over Jacket Inner Conductor OD Outer Conductor OD Nominal Size

#### **Electrical Specifications**

Cable Impedance	50 ohm ±1 ohm
Capacitance	79.7 pF/m   24.293 pF/ft
dc Resistance, Inner Conductor	4.232 ohms/km   1.29 ohms/kft
dc Resistance, Outer Conductor	4.987 ohms/km   1.52 ohms/kft
dc Test Voltage	2300 V
Inductance	0.2 µH/m   0.061 µH/ft
Insulation Resistance	100000 MOhms-km

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Jacket Spark Test Voltage (rms)	4000 V
Operating Frequency Band	1 – 13400 MHz
Peak Power	13.2 kW
Velocity	83 %

#### Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
1.0	0.383	0.117	13.2
1.5	0.469	0.143	13.2
2.0	0.542	0.165	13.2
10.0	1.219	0.372	6.97
20.0	1.732	0.528	4.91
30.0	2.128	0.649	3.99
50.0	2.762	0.842	3.08
85.0	3.626	1.105	2.34
88.0	3.691	1.125	2.3
100.0	3.943	1.202	2.16
108.0	4.103	1.25	2.07
150.0	4.864	1.482	1.75
174.0	5.254	1.601	1.62
200.0	5.65	1.722	1.5
204.0	5.709	1.74	1.49
300.0	6.99	2.13	1.22
400.0	8.139	2.481	1.04
450.0	8.665	2.641	0.98
460.0	8.767	2.672	0.97
500.0	9.166	2.794	0.93
512.0	9.283	2.829	0.92
600.0	10.107	3.081	0.84
700.0	10.983	3.347	0.77
800.0	11.807	3.599	0.72
824.0	11.998	3.657	0.71
894.0	12.542	3.823	0.68
960.0	13.04	3.974	0.65
1000.0	13.334	4.064	0.64

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1218.0	14.861	4.529	0.57
1250.0	15.075	4.595	0.56
1500.0	16.68	5.084	0.51
1700.0	17.887	5.452	0.48
1794.0	18.436	5.619	0.46
1800.0	18.47	5.629	0.46
2000.0	19.599	5.974	0.43
2100.0	20.147	6.141	0.42
2200.0	20.685	6.305	0.41
2300.0	21.214	6.466	0.4
2500.0	22.247	6.781	0.38
2700.0	23.249	7.086	0.37
3000.0	24.701	7.529	0.34
3400.0	26.558	8.094	0.32
3600.0	27.456	8.368	0.31
3700.0	27.899	8.503	0.3
3800.0	28.337	8.637	0.3
3900.0	28.771	8.769	0.3
4000.0	29.201	8.9	0.29
4100.0	29.628	9.03	0.29
4200.0	30.051	9.159	0.28
4300.0	30.47	9.287	0.28
4400.0	30.886	9.414	0.28
4500.0	31.298	9.539	0.27
4600.0	31.708	9.664	0.27
4700.0	32.114	9.788	0.26
4800.0	32.518	9.911	0.26
4900.0	32.919	10.033	0.26
5000.0	33.316	10.154	0.26
6000.0	37.158	11.325	0.23
8000.0	44.264	13.491	0.19
8800.0	46.943	14.308	0.18
10000.0	50.826	15.491	0.17
12000.0	57.001	17.373	0.15

### Material Specifications

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Dielectric Material	Foam PE
Jacket Material	PE
Inner Conductor Material	Copper-clad aluminum wire
Outer Conductor Material	Corrugated copper

#### Mechanical Specifications

Minimum Bend Radius, multiple Bends	25.4 mm   1 in
Minimum Bend Radius, single Bend	25.4 mm   1 in
Number of Bends, minimum	20
Number of Bends, typical	50
Tensile Strength	95 kg   209.439 lb
Bending Moment	2.3 N-m   20.357 in lb
Flat Plate Crush Strength	1.8 kg/mm   100.795 lb/in

#### **Environmental Specifications**

Installation temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Storage Temperature	-70 °C to +85 °C (-94 °F to +185 °F)
Attenuation, Ambient Temperature	68 °F   20 °C
Average Power, Ambient Temperature	104 °F   40 °C
Average Power, Inner Conductor Temperature	212 °F   100 °C

### Packaging and Weights

Cable weight

0.12 kg/m | 0.081 lb/ft

#### Regulatory Compliance/Certifications

#### Agency Classification

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system

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FSJ2-50, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 3/8 in, black PE jacket

#### Product Classification

Product Type Product Brand Product Series General Specifications Product Number Flexibility Jacket Color Performance Note

#### Dimensions

Diameter Over Dielectric Diameter Over Jacket Inner Conductor OD Outer Conductor OD Nominal Size

#### **Electrical Specifications**

Cable Impedance	50 ohm ±1 ohm
Capacitance	79.7 pF/m   24.293 pF/ft
dc Resistance, Inner Conductor	4.232 ohms/km   1.29 ohms/kft
dc Resistance, Outer Conductor	4.987 ohms/km   1.52 ohms/kft
dc Test Voltage	2300 V
Inductance	0.2 µH/m   0.061 µH/ft

Coaxial wireless cable HELIAX® | SureFlex® FSJ2-50

887019902/00 | SZ887019902/00 Superflexible Black Attenuation values typical, guaranteed within 5%

7.112 mm | 0.28 in 10.541 mm | 0.415 in 2.794 mm | 0.11 in 9.652 mm | 0.38 in 3/8 in

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Insulation Resistance	100000 MOhms-km
Jacket Spark Test Voltage (rms)	4000 V
Operating Frequency Band	1 – 13400 MHz
Peak Power	13.2 kW
Velocity	83 %

### VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
2.5–2.7 GHz	1.106	25.96
680–800 MHz	1.106	25.96
800–960 MHz	1.106	25.96
1700–2200 MHz	1.101	26.36

#### Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
1.0	0.383	0.117	13.2
1.5	0.469	0.143	13.2
2.0	0.542	0.165	13.2
10.0	1.219	0.372	6.97
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### Packaging and Weights

Cable weight

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### Regulatory Compliance/Certifications

#### Agency

ROHS

#### Classification

CHINA-ROHS ISO 9001:2015

Below maximum concentration value

Designed, manufactured and/or distributed under this guality management system

UK-ROHS



Designed, manafactarea and, or distributed ander this	quality management sys	
Compliant		
Compliant		

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